



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,251	09/28/2004	Norbert Grass	32860-000786/US	1342
30596	7590	09/26/2007	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O.BOX 8910 RESTON, VA 20195			SUGLO, JANET L	
		ART UNIT	PAPER NUMBER	
		2857		
		MAIL DATE	DELIVERY MODE	
		09/26/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/509,251	GRASS, NORBERT	
	Examiner	Art Unit	
	Janet Suglo	2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 03 July 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-6 and 8-27 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-6 and 8-27 is/are rejected.
- 7) Claim(s) 11 and 24 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 28 September 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

Response to Amendment

1. The action is responsive to the Amendment filed on July 3, 2007. Claims 1-6 and 8-27 are pending. Claims 1, 2, 4, 8-11, 13-15, 17-19, and 25-27 have been amended. Claims 7 and 28 have been cancelled.
2. Amendments filed July 3, 2007 overcome the objection to claim 1.
3. Amendments filed July 3, 2007 overcome 35 U.S.C. 112 rejections of claims 1, 9, 11, 14, 15, 26 and 27.

Claim Objections

4. **Claim 11** is objected to because of the following informalities: line 3 of claim 11 currently recites "parameter" which should be amended to recite either "a parameter" or "parameters". Appropriate correction is required.
5. **Claim 24** is objected to because of the following informalities: claim 24 is dependent upon claim 7, which has been cancelled. For the purposes of examination, it is assumed that claim 24 is dependent upon claim 1. Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1, 3-6, 8-21, and 23-27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Frank et al. (WO 99/60487) (hereinafter "Frank") in view of Döning et al. (US Patent 5,471,377) (hereinafter "Döning").

With respect to **claim 1**, Frank teaches a PC arrangement for visualization, diagnosis and expert systems for monitoring and controlling (e.g., page 6, lines 13-26) a variety of systems, comprising:

a server PC linked via a first network to the units (e.g., Figures 1 and 4-6); and client PCs forming a second network with the server PC and connected to the first network for at least one of data transmission and data exchange with the systems via the server PC (Figures 1 and 4-6), wherein

software structure for the PC arrangement is broken down into autonomous software modules which each realize at least one functionality (e.g., Page 2, lines 2-5), wherein one of the software modules is an autonomous server software module which realizes the at least one of data transmission and data exchange with the units and is implemented on the server PC connected to the units via the first network (e.g., page 17, lines 12-15; page 18, lines 13-27; page 19, lines 13-17);

wherein at least another of the software modules are implementable on at least one of a client PC and the server PC (e.g., page 17, lines 12-15; page 18, lines 13-27; page 19, lines 13-17),

wherein the server software module is used to categorize a large number of data from controllers of the units differently (e.g., page 15, ln 19-30),

wherein imaging of the measured and status data from the controllers in the server software module is cyclically updatable (e.g., page 16, ln 22-30), and

wherein other data is transmittable at the request of one of the client PCs (Frank: e.g., page 15, lines 19-30; page 16, lines 1-30).

Frank does not specify that the variety of systems includes high-voltage supply units for electrostatic filters. Döning teaches controlling high-voltage supply units for electrostatic filters (Döning: e.g., col 1, ln 11-15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Frank to include controlling high-voltage supply units for electrostatic filters as done by Döning because this control method enables optimal operation, create economic efficiency, and reduce personnel costs (Döning: e.g., col 1, ln 45-50 and 59-63).

With respect to **claims 3, 4, 21 and 23**, Frank further teaches connecting the server with the variety of systems using an Ethernet network using TCP/IP (which is a standard network) (Frank: e.g., page 7, line 20; page 19, line 15). Frank does not specify that the variety of systems includes high-voltage supply units for electrostatic filters. Döning teaches controlling high-voltage supply units for electrostatic filters (Döning: e.g., col 1, ln 11-15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Frank to include controlling

high-voltage supply units for electrostatic filters as done by Dönig because this control method enables optimal operation, create economic efficiency, and reduce personnel costs (Dönig: e.g., col 1, ln 45-50 and 59-63).

With respect to **claim 5**, Frank further teaches the server software module implemented on the server PC is a DCOM server (Frank: e.g., page 4, lines 1-20; page 12, lines 25-30).

With respect to **claim 6**, Frank further teaches a group of the various systems has an associated bus coupler (Frank: e.g., Figure 6). Frank does not specify that the variety of systems includes high-voltage supply units for electrostatic filters. Dönig teaches controlling high-voltage supply units for electrostatic filters (Dönig: e.g., col 1, ln 11-15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Frank to include controlling high-voltage supply units for electrostatic filters as done by Dönig because this control method enables optimal operation, create economic efficiency, and reduce personnel costs (Dönig: e.g., col 1, ln 45-50 and 59-63).

With respect to **claims 8 and 24**, Frank further teaches a connection between the server PC, which implements the server software module and the controllers is automatically startable when data from the controllers is requested at one or more client PCs (Frank: e.g., page 13, lines 21-24; page 20, lines 12-21). Frank does not specify that the variety of systems includes high-voltage supply units for electrostatic filters.

Dönig teaches controlling high-voltage supply units for electrostatic filters (Dönig: e.g., col 1, ln 11-15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Frank to include controlling high-voltage supply units for electrostatic filters as done by Dönig because this control method enables optimal operation, create economic efficiency, and reduce personnel costs (Dönig: e.g., col 1, ln 45-50 and 59-63).

With respect to **claim 9**, Frank further teaches an autonomous measured data software module archives the measured data (Frank: e.g., page 9, lines 20-28; page 10, lines 1-7).

With respect to **claim 10**, Frank further teaches the measured data software module is at least one of a databank and data system in which measured and status data are archived for a period of time (Frank: e.g., page 16, lines 22-30).

With respect to **claim 11**, Frank further teaches an autonomous display software module displays data, sets parameter, and controls units (Frank: e.g., page 17, lines 20-26). Frank does not specify that the units include high-voltage supply units for electrostatic filters. Dönig teaches controlling high-voltage supply units for electrostatic filters (Dönig: e.g., col 1, ln 11-15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Frank to include controlling high-voltage supply units for electrostatic filters as done by Dönig because

this control method enables optimal operation, create economic efficiency, and reduce personnel costs (Dönig: e.g., col 1, ln 45-50 and 59-63).

With respect to **claims 12 and 19**, Frank further teaches by use of the display software module, data stored in the measured data software module is accessible, measured and status data updated in the server software module is accessible and, by use of the server software module, further data available in the controllers is directly accessible (Frank: e.g., page 17, lines 20-26).

With respect to **claims 13 and 25**, Frank further teaches that the display software module is implementable on at least two client PCs and the server PC simultaneously (Frank: e.g., page 11, lines 1-4; Figure 4).

With respect to **claims 14, 26, and 27**, Frank further teaches that the display software module is configured to provide different monitoring and intervention measures to persons having different levels of authority (Frank: e.g., page 10, lines 10-30).

With respect to **claim 15**, Frank further teaches an autonomous control software controls auxiliary drives of devices (Frank: e.g., page 1, lines 14-19; page 2, lines 2-5). Frank does not specify that the devices include high-voltage supply units for electrostatic filters. Dönig teaches controlling high-voltage supply units for electrostatic filters (Dönig: col 1, ln 11-15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Frank to include controlling high-voltage supply units for electrostatic filters as done by Dönig because

Art Unit: 2857

this control method enables optimal operation, create economic efficiency, and reduce personnel costs (Dönig: e.g., col 1, ln 45-50 and 59-63).

With respect to **claim 16**, Frank further teaches the control software module is adapted to match components of the devices, automatically, to different operating conditions of the machines (Frank: e.g., page 14, lines 15-26). Frank does not specify that the machines include electrostatic filters. Dönig teaches controlling high-voltage supply units for electrostatic filters (Dönig: e.g., col 1, ln 11-15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Frank to include controlling high-voltage supply units for electrostatic filters as done by Dönig because this control method enables optimal operation, create economic efficiency, and reduce personnel costs (Dönig: e.g., col 1, ln 45-50 and 59-63).

With respect to **claim 17**, Frank further teaches an autonomous optimization software module optimizes operation of the machines (Frank: e.g., page 2, lines 10-12). Frank does not specify that the machines include high-voltage supply units for electrostatic filters. Dönig teaches controlling high-voltage supply units for electrostatic filters (Dönig: e.g., col 1, ln 11-15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Frank to include controlling high-voltage supply units for electrostatic filters as done by Dönig because

this control method enables optimal operation, create economic efficiency, and reduce personnel costs (Dönig: e.g., col 1, ln 45-50 and 59-63).

With respect to **claim 18**, Frank teaches constant updating of the various machines (Frank: e.g., page 4, lines 29-30), but does not specify optimizing the operation of the electrostatic filter. Dönig teaches redefining and adapting setpoint values to enable optimal (i.e., efficient) operation (Dönig: e.g., col 1, ln 45-52). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Frank to include controlling high-voltage supply units for electrostatic filters as done by Dönig because this control method enables optimal operation, create economic efficiency, and reduce personnel costs (Dönig: e.g., col 1, ln 45-50 and 59-63).

With respect to **claim 20**, Frank further teaches that the transmission and data exchange, via the server software module, is both cyclic and event-controllable (Frank: e.g., page 7, lines 8-11, page 16, lines 22-30).

8. **Claims 2 and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Frank et al. (WO 99/60487) (hereinafter “Frank”), in view of Dönig et al. (US Patent 5,471,377) (hereinafter “Dönig”), and further in view of Krivoshein (US Patent 6,449,715).

With respect to **claim 2**, Frank and Dönig teach parent claim 1, but do not specify that the network used is Profibus network. Krivoshein teaches using a Profibus network to connect devices (Krivoshein: e.g., col 1, ln 6-13). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Frank and Dönig to include the Profibus network as used by Krivoshein because the Profibus network allows smart field devices made by different manufacturers to be used together within the same process control network (Krivoshein: e.g., col 2, ln 2-6).

With respect to **claim 22**, Frank further teaches connecting the server with the client PCs using an Ethernet network using TCP/IP (Frank: e.g., page 7, line 20; page 19, line 15).

Response to Arguments

9. Applicant's arguments filed July 3, 2007 have been fully considered but they are not persuasive.

Applicant argues that Frank does not teach "other data is transmittable at a request of one of the client PCs;" however, Applicant's arguments are not well taken. As disclosed in Frank, the user creates and manipulates objects associated with a plurality of object categories (Frank: page 15, lines 19-22). The user further has control over the order and execution of objects (Frank: page 16, lines 22-24). Therefore the user has control over the request for a variety of data categories. The data is cyclically updated. The limitation of "other data" does not exclude the cyclically updated

properties of the data collection. The “other data” merely distinguishes the data from that of the “imaging of measured and status data.” Frank discloses that the data categories include bar graphs, Boolean images, and bound images which would qualify as imaging of measuring and status data. Other categories of data that are transmitted include, for example, damper, fan, and hot spot information. (Frank: page 15, line 19 – page 16, line 17) Further an email may be sent about real-time information if the system is programmed to do so (Frank: page 17, lines 1-3) Therefore “other” data is transmittable at a request of one of the client PCs.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janet Suglo whose telephone number is 571-272-8584. The examiner can normally be reached on M, T, Th, and S from 5:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on 571-272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Janet L Suglo
September 15, 2007



JEFFREY R. WEST
EXAMINER-AU 2857